The original description of *Ephysteris inustella* (Zeller, 1839) (Gelechiidae)

KLAUS SATTLER

Department of Entomology, Natural History Museum, Cromwell Road, London SW7 5BD, U.K.; K.Sattler@nhm.ac.uk

Abstract. Evidence is presented that Ephysteris inustella (Zeller) was first validly described in 1839.

The name *inustella* was originally proposed as Gelechia (Brachmia) artemisiella var. inustella Zeller (1839: 201) and subsequently raised to species rank (Zeller 1847: 853). However, this was mostly overlooked and the name was generally attributed to Herrich-Schäffer (1853: pl. 67, fig. 498; 1854: 171) until the situation was clarified by Sattler (1978: 61). Karsholt (1995: 149) accepted the authorship of Zeller but argued that the species had to date from 1847 as in 1839 it was published in synonymy under artemisiella and it was not clear in that paper that Zeller considered inustella as a 'Var.' of artemisiella. That interpretation is incorrect, as can be seen clearly in Fig. 1. In the first line Zeller cited, under number 70, the name *artemisiella*, which he attributed to von Tischer, followed by references to Treitschke and Fischer von Roeslerstamm. Line 2 begins with the term 'Var.' followed by a description that ends with 'Inustella Zell. in lit.'. There is no doubt that Zeller meant the name inustella to apply to that 'variety'; indeed he confirms it in 1847, where he stated under G. salinella: '... Gelechia inustella Z. which I mentioned in Isis 1839. p. 201. 70. as a variety of Gel. artemisiella and which almost certainly is a distinct species ...' (,... Gelechia inustella Z., die ich Isis 1839. S. 201. 70. als Varietät der Gel. artemisiella aufgeführt habe, und die doch wohl eigene Art ist; ...') (Fig. 2). It may have confused Karsholt that Zeller in 1839 had placed the name *inustella* after the description rather than at its beginning, as is customary. However, were it not meant to apply to the variety, it could only apply to artemisiella itself, but in that case Zeller would have placed inustella in brackets after the references as he had done in several other examples of *in litteris* names in the same paper. If one were to accept Karsholt's view one would have to assume that Zeller in 1847 misinterpreted what he had done in 1839, a rather unlikely scenario.

Regrettably Karsholt's interpretation was followed by Huemer & Karsholt (2010: 217) in their important recent volume of *Microlepidoptera of Europe*, making it necessary to rectify the matter here before it gains wider acceptance. At the same time Huemer & Karsholt also consider *inustella* Z. 1839 to be a misidentification of *Scrobipalpa artemisiella* (Treitschke, 1833); however, for the purposes of availability it is irrelevant that the presumed var. *inustella* is not conspecific with *artemisiella*. The description in 1839 clearly fulfils all the requirements of the *Code* and there is no valid reason for rejecting it.

nen die meisten gevolnnich verwight und. — Sin Sany un Riefergesträuch ben Glogau und Salzbrunn nicht selten. — Hierher gehört wahrscheinlich Degeer I. tab. 22. fig. 23., und folglich auch Dodecella Linn. 3.12.81. IV. 188. IV. 117 69. Vulgella S. V., Hbn. 346. — an Sahlweiden bey Gl. und Salzbrunn im Juny und July selten. — 8 Eremplare.

69. Vulgella S. V., Hon. 346. — an Sahlweiden ben Gl. und Salzbrunn im Juny und July selten. — 8 Eremplare. (* 70. Artemisiella Tischer, Tr., *FR. I. tab. 30. fig. 2. Var.; die Vordersschute hellgrau, braunlich bestäubt, 2 rauhe Puncte vor, 1—2 hinter der Mitte tiefschwarz, rostgelb einge= fast. Inustella Zell. in lit.

71. Nanella S. V., Hn. 264. — Hierher wahrscheinlich auch Pumilella S.V., Hbn. 268. — Berlin, Glogau in Obstgärten im Juny und July. — 13 Cremplare. 914/192.

Fig. 1. Isis 1839: 201.

402. (10.) Salinella n. sp.

Alis anterioribus dilute griseis, fusco pulvereis, punctis duobus ante, uno post medium fuscis ferrugineocinctis; posterioribus paulo latioribus canescentibus; palpis mediocribus, articuli ultimi basi annuloque fuscis (m.f.)

Var. b) alarum anteriorum punctis tautum luteis.

Sehr nahe der Gelechia inustella Z., die ich Ists 1839. S. 201. 70. als Barietät der Gel. artemisiella aufgeführt habe, und die doch wohl eigene Art ist; außerdem, daß die ganze Färbung von Salinella viel heller ist, unterscheidet diese sich wesentlich durch die Hinterslügel, welche bey ihr breiter sind als die Borderslügel, während ben Inustella das Umgekehrte Statt findet.

In der Größe ist Salinella gewöhnlich etwas über G. artemisiella. Ropf, Rückenschild und Vorderflügel sehr hellgelblich

Fig. 2. Isis 1847: 171.

The words *in litteris* in Zeller's first description indicate that he may have communicated that manuscript name in correspondence or in the form of named specimens to fellow lepidopterists as was common practice in those days. Perhaps unaware of Zeller's original description and subsequent reference, Herrich-Schäffer attributed *inustella* to 'FR' (Fischer von Roeslerstamm), from whom he may have received one or more specimens under that name. Zeller did not mention a type-locality for *inustella* in 1839 or 1847, nor was it fixed when a lectotype was designated (Sattler 1978: 61), but the assumption that *inustella* was collected in then German Silesia (Huemer & Karsholt 2010: 218) is here accepted. None of the Zeller specimens in BMNH bears a locality label and I did not find the name *inustella* mentioned in Zeller's quite detailed field diaries up to and including the year 1839. However, as the writing in the diaries, which are in old German script, is minuscule I might easily have overlooked the name. Herrich-Schäffer (1854: 171) gave the distribution as 'Schlesien', and amongst four specimens coming from Herrich-Schäffer, via the Hofmann collection, two are labelled respectively 'Schlesien' and 'Glogau'. It is highly likely that those specimens originated from Zeller, who lived in Glogau and for many years collected extensively in that area. Glogau, a town in the then German province of Schlesien, which was separated from Germany after World War 2, is now part of western Poland: Lower Silesia, Głogów (51°40' N 16°06' E).

Acknowledgements

I am indebted to Dr W. G. Tremewan, Truro, U.K., for his comments on the manuscript.

References

Herrich-Schäffer, G. A. W. 1847–1855. Systematische Bearbeitung der Schmetterlinge von Europa. Vol. 5. – Regensburg. 394 pp., pls. 1–124 (Tineides), 1–7 (Pterophorides, 1 (Micropteryges).

Huemer, P. & O. Karsholt 2010. Gelechiidae II (Gelechiinae: Gnorimoschemini). – *In*: P. Huemer, O. Karsholt & M. Nuss (eds), Microlepidoptera of Europe, vol. 6. – Apollo Books, Stenstrup. 586 pp.

Karsholt, O. 1995. Kommentiertes Verzeichnis der Symmocidae, Blastobasidae und Gelechiidae Ostdeutschlands (Lepidoptera). – Beiträge zur Entomologie 45: 137–154.

Sattler, K. 1978. The identity of the genus *Athrips* Billberg, 1820 (Lep., Gelechiidae). – Deutsche Entomologische Zeitschrift (Neue Folge) **25**: 57–61.

Zeller, P.C. 1839. Versuch einer naturgemäßen Eintheilung der Schaben. - Isis, Leipzig 1839: 167-220.

Zeller, P.C. 1847. Bemerkungen über die auf einer Reise nach Italien und Sicilien beobachteten Schmetterlingsarten. – Isis, Leipzig **1847**: 121–159, 213–233, 284–308, 401–457, 481–522, 561–594, 641–673, 721–771, 801–859, 881–914.